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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,788	12/27/2001	Curtis E. Farrell	0437-A-269	1351

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CAHILL, SUTTON & THOMAS P.L.C.
155 Park One
2141 E. Highland Avenue
Phoenix, AZ 85016

EXAMINER

FOX, CHARLES A

ART UNIT	PAPER NUMBER
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3652

DATE MAILED: 04/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/034,788

Applicant(s)

FARRELL ET AL.

Examiner

Charles A. Fox

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 30 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-12, 14 and 15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-12, 14 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3,5-10,12,14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nichols et al. in view of Nichols et al. In regards to claims 3 and 8 Nichols et al. US 5,730,575 (herein Nichols '575) teaches a device for transferring wafers between cassettes comprising:

a support structure (14) for supporting 2 wafer cassettes;

a first registration feature (20) located in a fixed relationship to said support structure, and a second registration feature (22) located in a fixed relationship to said support structure;

wherein said first and second registration features can be of a plurality of different sizes;

a carriage mechanism (44) supported by and movable along a track mechanism (46,48) that is supported in a fixed manner relative to the support structure;

a first pushing member (34) for moving wafers from a first cassette to a second cassette. Nichols '575 does not teach a second wafer pushing member. Nichols et al. US 5,735,662 (herein Nichols 2) teaches a device for moving wafers from a cassette to

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a holding area and back to the cassette wherein the device has a first pushing mechanism (62) for moving the wafers in a first direction and a second pushing mechanism for pushing the wafers in a direction opposite said first direction and first and second elongated slots in a support structure(46) through which the first and second pushing members extend upwards. It would have been obvious to one of ordinary skill in the art, at the time of invention to provide a second pushing mechanism as taught by Nichols 2 to the device taught by Nichols '575 in order to allow the device to operate in either direction without having to move the first and second wafers cassettes from one position to the other.

In regards to claim 5 Nichols 2 also teaches the device being made of a plastic material.

In regards to claim 6 Nichols '575 further teaches the track members are comprised of guide rods (46,48) that are cylindrical and parallel to said support structure and each other.

In regards to claim 7 Nichols '575 also teaches that the carriage has two holes through which the guide rods move to allow bi-directional movement of said carriage.

In regards to claim 9 Nichols 2 further teaches the first and second pushing members are mounted on a push/pull rod (80) that extends through a carriage (82) to which it is fixed.

In regards to claim 10 Nichols 2 also teaches that each of the pushing members comprises:

a lower vertical portion connected to said center rod (80);

a horizontal portion with a first end connected to said lower vertical portion;
an upper vertical portion connected to a second end of said horizontal portion;
wherein the 3 portions are of unitary construction.

In regards to claim 12 Nichols '575 also teaches the device as having 4 support legs (71-74) and that each of the track members is supported by two of said leg members.

In regards to claim 14 Nichols '575 teaches a method of moving wafers from one cassette to another comprising the steps of:

supporting a first wafer cassette adjacent to and in alignment with a second cassette, one of said cassettes containing wafers;

supporting a first wafer pushing member for selectively moving wafers from one cassette to the other;

providing a plurality of different sized registration features to match those of different types of containers;

operating a mechanism to move the wafers from the filled cassette and into the empty cassette. Nichols '575 does not teach the step of transferring the wafers with a second pushing member.

Nichols 2 teaches a method for transferring wafers comprising the steps of;

supporting a first wafer cassette and a means for holding a plurality of wafers;

supporting a first and a second pushing member;

operating the pushing elements to move wafers from the cassette into the holding means or operating the machine in reverse to move the wafers into the

cassette. It would have been obvious to one of ordinary skill in the art, at the time of invention to modify the methods taught by Nichols '575 with the methods taught by Nichols 2 in order to move the wafers from either cassette to the other without having to reposition either of the cassettes during operations.

In regards to claim 15 it would have been obvious to one of ordinary skill in the art, at the time of invention to move the device taught by Nichols '575 and Nichols 2 such that the carriage was in a central position before removing the cassettes as one of the pushing members would remain in one of the cassettes if this was not done and one of the cassettes could not be removed.

Claims 4,11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nichols '575 and Nichols 2 as applied to claim 3 above, and further in view of De Luna, Jr. et al. Nichols '575 and Nichols 2 teach the limitations of claim 3 as above, they do not teach a handle being located on the carriage. De Luna, Jr. Et al. US 2002/0098067 teaches a device for transferring wafers from a first cassette to a second cassette with a handle (46) for moving a pushing member. It would have been obvious to one of ordinary skill in the art, at the time of invention to provide a handle as taught by De Luna, Jr. et al. on the device taught by Nichols '575 and Nichols 2 in order to allow the device to be moved in either direction from a central point by a single operator who does not have to shift positions.

In regards to claim 11 Nichols '575 further teaches an indicator plate (28) in the center of the support structure. It would have been obvious to one of ordinary skill in the art, at the time of invention to reference the center plate taught by Nichols '575 and

Nichols 2 with the handle taught by De Luna, Jr. et al. to gage the relative position of the carriage in relation to the support structure.

Response to Amendment

The amendment to the claims filed on January 30, 2004 has been entered into the record.

Response to Arguments

Applicant's arguments filed January 30, 2004 have been fully considered but they are not persuasive. The Nichols '575 reference teaches using different sized registration assemblies to accommodate different sized wafer carriers. This is a clear suggestion that one would provide a registration feature on a mounting area that is made to receive a container. As such the examiner hold that providing two different registration features is an obvious expedient contemplated by the Nichols '575 reference, and one of ordinary skill in the art would have realized its usefulness without further teachings.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles A. Fox whose telephone number is 703-605-4294. The examiner can normally be reached between 7:00-5:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen D. Lillis can be reached at 703-308-3248. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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4/16/04



EILEEN D. LILLIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600